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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

09/383,150

08/25/1999

RONG-FUH SHYU

3576BP/S295

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09/03/2002

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EXAMINER

ABRAHAM, FETSUM

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 09/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/383,150

Applicant(s)

SHYU, RONG-FUH

Examiner

Fetsum Abraham

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2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

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CLAIMS REJECTION

1. The indicated allowability of claims 1-8 is withdrawn in view of the newly discovered reference(s). Rejections based on the newly cited reference(s) follow.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by YUKIO (JP 2-294061).**

As for claims 1 and 4, the document shows a structure/package in figures 1 and 2 comprising a unitary lead frame (13) having chip positioning windows formed in it for receiving two IC chips, a plurality of internal connection leads (16) adjacent to the windows adapted to be electrically connected to bonding pads on the chips in the windows, and specifically designed for internal communication purpose between the chips, a plurality of external connection leads (13) on the frame designed to be electrically connected with bonding pads on the IC chips and serving as external communication means with external circuits.

As for claims 2,5, the internal connection leads are wire-bonded to the bonding pads (see element 15 in figure 2).

As for claim 3,6, the external connection leads are wire-bonded to the bonding pads on the IC chips (see element 13 in figures 1 and 2).

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over YUKIO (JP 2-294061).**

The prior art discloses all subject matter claimed but may not have classified the chips as master and slave Ics. However, there is nothing in the document that teaches away from that concept by limiting the application of the structure to specific integrated circuits. Therefore, it would have been obvious to one skilled in the art to consider the structure as applicable to such Ics since it is designed for all types of known Ics in the art.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over YUKIO (JP 2-294061) in view of Taniguchi et al (6,134,161).

The prior art discloses all subject matter claimed but omits an IC with embedded test circuit. However, Taniguchi et al teach the claimed elements in the abstract. Therefore, it would have been obvious to one skilled in the art to include test circuits within IC chips, since the method improves circuit density per area by eliminating the formation of the two elements in separate wafers.

Any inquiry concerning this communication should be directed to Fetsum Abraham at telephone number (703) 305,3793, or by E-mail at fetsum.abraham@uspto.gov.

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Any inquiry of a general nature or relating to the status of this application should be directed to the ***SPE of AU:2826*** at (703)308-6601, or the ***Group receptionist*** at (703) 308-0956.

Fetsum Abraham

8/23/02